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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/533,395	04/30/2005	Paulus Karremans	P17418-US2	2194								
27045 ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024	7590 07/16/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">PARK, JEONG S</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2154</td><td></td></tr></table>		EXAMINER		PARK, JEONG S		ART UNIT	PAPER NUMBER	2154	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,395	Applicant(s) KARREMANS, PAULUS	
	Examiner Jeong S. Park	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/30/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 2-9 and 11-18 are objected to because of the following informalities:

In claim 2, line 1, the phrase "a method for policy-based control of a communication network" should be corrected as --the method for policy-based control of the communication network-- for clear understanding of the claim. Similar correction should be made for claims 3-9;

In claim 4, line 3, the phrase "a preference-or priority scheme" should be corrected as --a preference or priority scheme-- for clear understanding of the claim. Similar correction should be made for claims 5, 13 and 14;

In claim 5, line 4, the word "a policy" should be corrected as --said policy-- for clear understanding of the claim. Similar correction should be made for claim 14; and

In claim 11, line 1, the word "a system for policy-based control of a communication network" should be corrected as --the system for policy-based control of the communication network-- for clear understanding of the claim. Similar correction should be made for claims 12-18.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2154

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6, 8-12, 15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kohli et al. (hereinafter Kohli)(U.S. Patent No. 7,213,068 B1).

Regarding claims 1 and 10, Kohli teaches as follows:

A method or a system for policy-based control of a communication network having a distributed architecture (a policy management system implementing a programmable policy-based approach for managing network elements in a telecommunication network, see, e.g., abstract); including at least one heterogeneous communication network (the policy manager is adapted to manage many different types of network elements, see, e.g., col. 3, lines 42-44) comprising;

Messaging between network elements (network elements perform a network-related function, see, e.g., col. 3, lines 47-48), said network elements comprising at least one policy enforcement point (PEP)(12 and 14 in figure 1), one or more policy decision points (PDPs)(policy server 8 in figure 1), which network elements provide for registering events (the policy server issues event registrations, which causes event registration to be performed at the corresponding PEPs, see, e.g., col. 8, lines 28-31);

Sending notifications (event notification) of the occurrence of events (PEPs send their events directly to the policy server or policy agent, see, e.g., col. 8, lines 39-41); and

Enforcing a policy upon said events if certain conditions are met (action command being sent to the event originating PEPs, see, e.g., col. 8, lines 55-61),

Art Unit: 2154

wherein said at least one PEP serves as a server towards at least one PDP, being a client (device server (PEP), 18 and 20 in figure 1, collects events and distributes the events to policy server (PDP), therefore the device server is functioning as a server and the policy server as a client).

Regarding claims 2 and 11, Kohli teaches as follows:

The policies of a PEP are available to the one or more PDPs (the policy server (PDP) register its policy events with all PEPs being managed by a policy which means both PDP and PEP are running under the same policy, see, e.g., col. 8, lines 26-28).

Regarding claims 3 and 12, Kohli teaches as follows:

The one or more PDPs subscribe to one or more PEP policy enforcement capabilities outside the service domain of a PDP (the policy server generates an action for a remote network (outside the service domain) element through a directory server, 16 in figure 1, which maintains a domain registry used to drive PEP addresses, see, e.g., col. 8, line 66 to col. 9, line 6).

Regarding claims 6 and 15, Kohli teaches as follows:

After the occurrence of the event, said messaging is synchronous, wherein event data are sent together with the notifications from the PEP to the PDP (the specified events raised at the various PEPs are forwarded to the appropriate policy processing point as an event notification, see, e.g., col. 13, line 64 to col. 14, line 5).

Regarding claims 8 and 17, Kohli teaches as follows:

A PEP registering events that a PDPs can subscribe to (the policy server issues event registrations, which causes event registration to be performed at the

Art Unit: 2154

corresponding PEPs, see, e.g., col. 8, lines 26-31);

The PEP registering policy enforcements (policy actions) that the PDP may suggest to the PEP (action evaluator, 30 and 32 in figure 1, provides the abstraction of the same semantic actions across a spectrum of devices, see, e.g., col. 10, lines 34-44);

The PDP (policy server) obtaining said registered events (the policy server issues event registrations, see, e.g., col. 8, lines 26-31); and

The PDP (policy server) obtaining said registered policy enforcements (policy actions)(the policy server, 8 in figure 2, and the policy agents, 8a in figure 2, are the components that process events received from the PEPs and which apply the policy rules to generate the policy actions, see, e.g., col.8, lines 47-49).

Regarding claim 9, Kohli teaches as follows:

The PDP (policy server) requesting a PEP to be notified of a specified event (the event registration information is consulted whenever an event is raised at a PEP, and the event is forwarded for delivery to any policy that has registered for the event, see, e.g., col. 13, lines 53-56);

The PDP (policy server) requesting a PEP for a possibility to enforce a policy (the policy server, 8 in figure 2, and the policy agents, 8a in figure 2, are the components that process events received from the PEPs and which apply the policy rules to generate the policy actions, see, e.g., col.8, lines 47-49);

The PEP notifying a PDP that the specified event has occurred (the specified events raised at the various PEPs are forwarded to the appropriate policy processing

Art Unit: 2154

point as an event notification, see, e.g., col. 13, line 64 to col. 14, line 5);

The PDP suggesting to said PEP a policy enforcement appropriate for said specified event (the firing of an action may result in an action command being sent to the event originating PEPs, see, e.g., col. 8, lines 52-57); and

The PEP enforcing said policy enforcement (the policy rules request an action to be taken at one or more PEPs, see, e.g., col. 14, lines 30-35).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohli et al. (hereinafter Kohli)(U.S. Patent No. 7,213,068 B1) as applied to claims 1 and 10 above, and further in view of Putzolu (U.S. Patent No. 6,578,076 B1).

Regarding claims 4, 5, 13 and 14, Kohli teaches as follows:

Multiple PDPs used in policy processing (policy processing responsibilities are distributed between the policy server, 8 in figure 2, and multiple policy agents, 8a in figure 2, see, e.g., col. 4, lines 1-2); and

Kohli does not teach that a preference or priority scheme for sending the notifications to one or more of multiple PDPs or accepting a policy from a PDP to enforce the proper PEP.

Putzolu teaches as follows:

Policy-based network management applies a client-server paradigm and outsources policy decisions to a plurality of policy servers (see, e.g., col. 2, lines 40-46); and

Accept with priority scheme used to make a local decision at policy client (PEP)(see, e.g., col. 5, lines 16-26).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Kohli to include priority scheme between multiple PDPs to select one of those and to accept a policy from the multiple PDPs, as taught by Putzolu in order to select a proper policy server and policy based on the policy and event registration information among the multiple policy servers.

6. Claims 7, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohli et al. (hereinafter Kohli)(U.S. Patent No. 7,213,068 B1).

Regarding claims 7 and 16, Kohli teaches all the limitations of claim except for asynchronous messaging between PEP and PDP.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Kohli to include the asynchronous messaging in order to first select a proper PDP among multiple PDPs and then to send event data from the PEP to the selected PDP.

Regarding claim 18, Kohli teaches as follows:

Network administrators interface the policy server for run-time policy loading and unloading (see, e.g., col. 3, lines 56-58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Kohli to include multiple policy servers as a stakeholder in order to enforce the accurate policy enforcements responding to the specified events from the PEPs.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeong S. Park whose telephone number is 571-270-1597. The examiner can normally be reached on Monday through Thursday 7:30 - 5:00 EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/533,395
Art Unit: 2154

Page 9

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July 6, 2007



NATHAN FLYNN
SUPERVISORY PATENT EXAMINER